

black, the hairs banded with ochraceous buff; hands mixed black and ochraceous buff; feet black, with the base of the hairs buff; tail mixed black and whitish yellow.

Measurements. Size about the same as *P. doguera*. Skull: total length 196 mm.; occipito-nasal length 166; hensel 141; intertemporal width 56; zygomatic width 122; palatal length 93; breadth of brain-case 82; length of nasals 77; length of upper molar series 48; length of mandible 115; length of lower molar series 65.

Type. Adult male in British Museum. No. 1. 8. 9. 20. Presented by Sir H. H. Johnston.

Two specimens were procured by Sir H. H. Johnston, one at Baringo and one at Nandi, north of Mt. Kenia. Compared with Abyssinian examples of *P. doguera* the present species is a much darker animal and the bands on the hairs are paler and more yellow, those of *P. doguera* being more ochraceous, with less of the black showing. The general tone of the Baringo specimen, while seal-brown, has a greyish tinge, while that of Abyssinian examples is more ochraceous. The cranial characters, however, will easily distinguish the present form from its ally.

I am indebted to my friend Mr. Oldfield Thomas for the privilege of describing the species.

LXXII.—*List of a Collection of small Mammals made by Mr. A. L. Butler in the Bahr-el-Ghazal.* By R. C. WROUGHTON.

THE following is a list of the small mammals collected by Mr. Butler between Renk, on the White Nile, and Dem Zubeir, in the Bahr-al-Ghazal. The collection, though small, was obtained under trying conditions. It is of special interest, not so much on account of the new forms it contains, as that it was made in a region whence little has been brought since Heuglin's collection nearly fifty years ago.

1. *Epomophorus anurus*, Heng.

♂. 50; ♀ (?). 51. Dad Majok. 29. iii. 07.
 1 topotypes of Heuglin's species.

2. *Lavia frons affinis*, And. & Wrought.

♂. 1; ♀. 2. Renk, White Nile. 7. i. 07.

3. *Chærophon* sp.

♀. 3. Gamai Za. 6. i. 07.

4. *Crocidura sericea*, Sund.

♂. 41, 45; ♀. 40, 44. Chak Chak. 13. iii. 07.

5. *Crocidura* sp.

♂. 33. Between Chak Chak and Dem Zubeir. 7. iii. 07.

6. *Funisciurus multicolor*, Rüpp.

♂. 11. Kátha (Khor Gitti). 31. i. 07.

♂. 43. Chak Chak. 13. iii. 07.

7. *Xerus erythropus leucombrinus*, Rüpp.

♂. 22; ♀. 20. Chak Chak. 22/24. ii. 07.

8. *Tatera Emini*, Thos.

♂. 5, 6; ♀. 4, 10 (juv.). Chak Chak. 19. i. 07.

9. *Tatera macropus*, Heug.

♂. 46; ♀. 15, 23 (juv.). Chak Chak. ii. 07.

10. *Tatera robusta*, Wagn.

♂. 30; ♀. 31. Halfway between Chak Chak and Dem Zubeir. 3. iii. 07.

11. *Mus* sp. (multimammate).

♀. 9. Moyen. 21. i. 07.

♀. 12. Kátha. 31. i. 07.

♂. 26, 42; ♀. 13, 14. Chak Chak. 13/16. iii. 07.

12. *Mus alghazal*, sp. n.

♂. 24, 27. Chak Chak. 24/25. ii. 07.

♂. 28, 36. Between Chak Chak and Dem Zubeir. 2/9. iii. 07.

A rat rather smaller than *M. Hindei*, Thos.

Fur soft and silky, about 10 mm. long on the back. General colour above dull tawny (near "russet"), the hairs slate-grey for basal two thirds, then "ochraceous buff," a considerable proportion of somewhat longer wholly black

hairs scattered among the rest; underside white, basal fourth of hairs slaty. Head and face like back, but a bright buff patch on cheek below eye. Upper lip and chin white like belly. Hands and feet pure white. Tail sparsely clad; rings 8=10 mm.

Skull markedly smaller in all details than that of *M. Hindei*, except the teeth, which are about the same size.

Dimensions of the type:—

Head and body 147 mm.; tail 156; hind foot 28; ear 16.

Skull: greatest length 36; basilar length 29; greatest breadth 18; nasals 14; interorbital breadth 5.5; brain-case breadth 14.5; diastema 9.5; length of upper molar series 6; bullæ 7.

Hab. Chak Chak, Bahr-el-Ghazal.

Type. Adult male. Collector's number 24. Taken 25th February, 1907.

Four specimens (unfortunately all males) examined.

13. *Mus Blainei*, sp. n.

♀. 7, 8. Ayum. 4. i. 07.

♀. 19. Chak Chak. 22. ii. 07.

♂. 39. Between Chak Chak and Dem Zubeir. 9. iii. 07.

♂. 47. Between Chak Chak and the Pongo. 19. iii. 07.

A small soft-furred mouse with a rather short tail.

Size about as in *M. Alleni* and *M. Denuie*, but with a quite short tail.

Fur soft and silky, about 10 mm. long on the back.

General colour above "isabella," the hairs slate-colour from their bases for three fourths their length, terminal fourth pale orange-buff with black tips; underside white, the basal half of hairs slate-colour. Face below the eyes, sides of neck, and flanks "orange-buff" with a mixture of "vinaceous buff"; chin and upper lip white; hands and feet white; tail sparsely haired, darker above than below, with about 2 rings=1 mm.

Skull and teeth of the usual type in *Mus*.

Dimensions of the type:—

Head and body 100 mm.; tail 103; hind foot 22; ear 20.

Skull: greatest length 28; basilar length 22; greatest breadth 13.5; nasals 10; interorbital breadth 4.3; brain-case breadth 11.3; diastema 7.8; length of upper molar series 4.5; bullæ 5.

Hab. Chak Chak, Bahr-el-Ghazal.

Type. Young female. Collector's number 19. Taken 22nd February, 1907.

Five specimens examined.

I have named this species after Mr. Gilbert Blaine, who was Mr. Butler's companion on the tour during which the collection was made.

14. *Mus Butleri*, sp. n.

♀. 37. Between Chak Chak and Dem Zubeir. 8. iii. 07.

A mouse rather smaller than the last, with a longer tail and pure white belly.

Size rather smaller than *M. Blainei*.

Fur soft and silky; 6-8 mm. long on the back.

General colour above "clay-colour," the hairs slate-colour from their bases for two thirds their length, terminal third a bright fawn, with short black tips; underside pure white, the hairs white to their bases; face below the eyes and sides of the neck and body fawn; line between upper and belly colours sharply defined; feet white; tail sparsely haired, darker above than below, about 7-8 rings=5 mm.

Skull and teeth of the type normal in the genus *Mus*.

Dimensions of the type:—

Head and body 90 mm.; tail 118; hind foot 20; ear 16.

Skull: greatest length 27; basilar length 21; greatest breadth 13; nasals 10; interorbital breadth 4; brain-case breadth 12; diastema 7; length of upper molar series 4.5; bullæ 5.

Hab. Between Chak Chak and Dem Zubeir, Bahr-el-Ghazal.

Type. Young female. Collector's number 37. Taken 8th March, 1907.

Though the size and proportions of the skull are so similar in the two species, the present form is separable at once from the last by its proportionally much longer tail and snow-white belly. The species most closely resembling this one is perhaps *M. Derricæ*, Thos., from Ruwenzori; but in that animal the tail is proportionally still longer and the slaty bases of the hairs of its underside distinguish it markedly from *M. Butleri*.

15. *Arvicanthis zebra*, Heugl.

♂. 48, 49. Dad Majok. 30. iii. 07.

Topotypes of Heuglin's species.

16. *Arvicanthis* sp.

♂. 34, 35, 38. Between Chak Chak and Dem Zubeir.
7/9. iii. 07.

17. *Thamnomys Macmillani*, sp. n.

♂. 21, 25. Chak Chak. 24. ii. 07.

A small *Thamnomys* of the *T. arborarius* group.

Size as in *T. arborarius*.

Fur soft and silky, about 10 mm. long on back.

General colour above a dark "olive-buff," with a good deal of ochraceous colouring on the median line, especially bright on the rump, basal three fourths of hairs dark slate; underside pure white, the hairs white to their bases. Feet pale buff. Tail dark, pale below for basal half; 17 rings = 10 mm.; sparsely clothed with dark hairs; hairs short for basal half of tail, then lengthening to 3-4 mm. on terminal fourth.

Skull and teeth as in *T. arborarius*, but markedly smaller in all details judging from Peters's description and figure.

Dimensions of type:—

Head and body 102 mm.; tail 160; hind foot 22; ear 15.

Skull: greatest length 28; basilar length 21; greatest breadth 13.5; nasals 9.5; interorbital breadth 4.3; brain-case breadth 12; diastema 6.7; length of upper molar series 4.3; bullæ 5.

Hab. Wouida, N. of Lake Rudolf. Alt. 6200'.

Type. Adult female. B.M. no. 6. 11. 1. 38. Taken by Mr. Zaphiro on the 30th June, 1905, and presented to the British Museum by Mr. W. N. McMillan.

Two specimens sent by Mr. Butler from Chak Chak are quite like the type in all essential characteristics (their skulls unfortunately are imperfect). The colour-pattern is also similar, but the grey-drab shoulder-patches are even more clearly marked in Mr. Butler's specimens.

18. *Thryonomys Swinderenianus*, Temm.

Skull only. Chak Chak. 1. iii. 07.

19. *Gazella albonotata*, Roths.

No specimen of this striking species had hitherto been obtained by the National Museum.